UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/288,856	04/09/1999	TETSURO NAGATSUKA	0557-4645-2	7945

22850   7590   07/16/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
2175	

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☒ This action is **FINAL**.　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-3,7-25 and 42-50* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *12,14-25,44 and 46-49* is/are allowed.

6) ☒ Claim(s) *1-3, 7-11, 13, 42, 43, 45, 50* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　1. ☐ Certified copies of the priority documents have been received.

　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50: The preamble of claim 50 calls for "items extracted from the contents of the document", however the body of the claim makes not recitation of an extraction means. Accordingly, the preamble and the body of the claim are inconsistent.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-11, 13, 42, 43, 45, 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Numata (U.S. Patent 5,943,669).

Claim 1: Reference is made to FIG. 1, and its associated discussion at col. 5, line 42 through col. 6, line 28. Numata discloses inputting means (document storage section 1); designating means (classification unit designation section 2) which designate specific sections of a document; converting means (fundamental vector generation section 4) which parses the document into the discrete sections designated by the designating means (2) and generates fundamental vectors, which are the converted data; and classifying means (classification section

8) which classifies the document using the converted data. A display means is provided by the display section (10) and its supporting programming (blocks 12a, 12b, 12c).

Claim 2: Numata discloses a document vector producing means (vector synthesis section 6 and composite vector maintenance section 7) which produces, combines and stores synthesized feature vectors that are used by the classification section in classifying the document.

Claim 3: Col. 5, line 54 states that the converting means (4) partitions the documents by means of the classification units. FIG. 12 illustrates the inclusion of symbols, such as "title", "head" and "body" which illustrate the partitioned sections.

Claim 7: See remarks for claim 1.

Claim 8: See remarks for claim 2.

Claim 9: See remarks for claim 3.

Claim 10: FIG. 1 of Numata discloses input means (1) for inputting a document, analysis means (3) for analyzing the content of a document; vector producing means (4, 5) for generating two types of document vectors; transforming function calculating means (equation 18 shown at col. 25, line 67), vector transforming means (6), classification means (8) for classifying the document and classification result storing means (9). Note that the transforming function calculating means (equation 18 at col. 25, line 67) will produce a dimensional number (T) that is different from the dimensional numbers (F, G and H) that represent vectors input into the equation.

Claim 11: Any of the formulas (18) or (19) illustrated in col. 25, line 67 through col. 26, line 11 read as the inner product calculating means. Without detail on what formula is actually

used to perform the calculation, any mathematical formula utilizing the feature vectors would read on this phrase.

Claim 13: Numata discloses vector storing means (7). The transforming function is part of the computer program that classifies the document. Thus, whichever system is storing the computer program is also storing the transforming function.

Claim 42: See remarks for claim 10.

Claim 43: See remarks for claim 11.

Claim 45: See remarks for claim 13.

Claim 50: See remarks for claim 1. Claim 50 only differs from claim 1 in its recitation of "items which are irrespective of chapters, clauses, sentences and paragraphs of the document.." This recitation has been indicated as being new matter, and has not been considered.

Claims 12, 14-25, 44 and 46-49 are allowable over the prior art of record.

Remarks

Applicant's arguments and amendments have been considered.

Claim 1: Applicant argues that the classification designation section (2) of Numata does not disclose the classification of an item of "read" data. Since claim 1 does not recite a "reading means", it is presumed that applicant is arguing that the classification designation section (2) of Numata does not classify documents that are "input", since the "input section" is the only portion of claim 1 that it capable of "reading" anything. For this argument, examiner does agree. The classification section (2) of Numata classifies documents that were input by the inputting means (1). If this were not true, then the classification section would have no data available to classify,

and would essentially have nothing to work on. Examiner maintains that the document classification section (2) performs the classification functions on input documents.

Applicant also argues that Numata does not teach the claimed requirement that converted document data contain only data corresponding to designated items. Examiner finds that this feature is in fact taught by Numata. The converting means in Numata is the fundamental vector generation section (4) which generates vectors which are the converted data. The vectors are only generated for data that was designated by the designating means (2). This is evidenced by the statements in col. 5, lines 53-57 which read as follows:

"Fundamental vector generation section 4 partitions the logical structure of the documents that were analyzed in logical structure analysis section 3 <u>by means of the classification units that were designated by the classification unit designation section 2....</u>"

In other words, the vector generation section (converting means) only acts on data that was designated by the classification unit (designating means) and only produces vectors for that designated data.

<u>Claims 7 and 50:</u> These arguments reflect those arguments set forth with respect to claim 1. It is also noted that applicant's amendments have created a new grounds of rejection under 35 USC 112, second paragraph for claim 50. See the remarks for claim 50 at the beginning of the office action.

<u>Claim 10:</u> Applicant argues that Numata does not show the concept of calculating a transforming function in which similarity is reflected by a dimensional number different from a dimensional number of a document feature vector produced with respect to document data. This argument is not correct. Examiner indicated that the transforming function is the equitation (18).

This equation transforms dimensional numbers associated with document feature vectors (F), (G), (H) and (I) into a new dimension number (T). It is also noted that each one of the variables (F), (G), (H), (I) and (T) are considered to be dimensions. Since these dimensions can be associated with actual values to produce numerical calculations with equation (18), these values become the claimed "dimensional values".

Claim 42: Applicant's arguments regarding claim 42 reflect that of claim 10.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.

Sam Rimell
Primary Examiner
Art Unit 2175